HIDDEN FLEXURE ULTRA PLANAR OPTICAL ROUTING ELEMENT

ABSTRACT OF THE DISCLOSURE

The present invention provides improved MEMS devices and methods for use

with fiber-optic communications systems. In one embodiment, an apparatus for steering light
has a beam layer (160) with a reflective surface. The device uses a multi-layer electrode
stack underlying the beam layer to rotate the beam layer into a desired position.

Additionally, an underlying rotation and support structure provides a stable platform for the
beam layer when the device is activated. In one embodiment, the underlying structure

provides a multi-point landing system to maintain a generally flat beam layer upper surface
when the device is activated.

15

20

25

30

35 DE 7027095 v1